

### **ABSTRACT OF THE DISCLOSURE**

A semiconductor device comprises a memory cell array, a counting circuit, a control circuit, a specification circuit, a selection circuit and a data I/O circuit. The selection circuit effects switching between a normal mode and a synchronous mode in a mode setting cycle. In the normal mode, setting of addresses is performed irrespective of a clock signal. In the synchronous mode, an edge of the clock signal determines the timing of operation.